

Claim Amendments

1-20. (canceled)

21. (new) In a process of making halogen lamp bulbs, discharge lamp bulbs, arc discharge lamp bulbs, neon lights, glass electrodes, analytical process glass, reagent container glass, glass test tubes, burets, pipettes, titration cylinders, glass reagent bottles, tubular glass parts in duct work, chemical equipment construction glass, flow meter glass, biotechnological process glass, display component glass, medical glass containers, ampules, bottles, injection bottles, cylinder ampules, or pharmaceutical product primary packaging glass, with a predetermined interior glass surface quality and purity, by hot forming, a method of making glass comprising the steps of:

(a) producing a melt of molten glass;

(b) passing molten glass along a tool to form a glass body from said melt of molten glass;

(c) regulating a stream of gas to provide a sufficient stream of gas having a sufficient oxygen content along said glass body to minimize contamination of said glass body and thus to produce a glass surface of predetermined quality and predetermined purity;

(d) continuing said regulating step (c) for a period of time

sufficient to set and modify a surface condition of said glass body to a surface depth in the range of approximately 1000 to approximately 2000 nanometers.

22. (new) The method according to Claim 21, wherein said continuing step (d) comprises continuing said regulating step (c) for a period of time sufficient to set and modify the surface condition of said glass body to a surface depth of approximately 2000 nanometers.

23. (new) The method according to Claim 21, wherein said continuing step (d) comprises continuing said regulating step (c) for a period of time sufficient to set and modify the surface condition of said glass body to a surface depth of approximately 1000 nanometers.

24. (new) The method according to Claim 22 wherein hot forming according to step (b) comprises drawing said glass body from said melt of glass.

25. (new) The method according to Claim 24 wherein glass is drawn in tubular form from said melt of glass.

26. (new) The method according to Claim 25 which comprises:
exposing, during drawing of glass in tubular form, the inner surface of glass in tubular form to said stream of gas.

27. (new) The method according to Claim 22 wherein glass is

drawn in flat form from said melt of glass.

28. (new) The method according to Claim 22 comprising at least one of:

maintaining said melt of molten glass at a viscosity with a value selected in the range of from 10^4 dPas (10,000 decipascals) to 10^5 dPas (100,000 decipascals); and

said glass body is hot formed from a melt maintained at a temperature of more than 1000 degrees Celsius, in particular from a hot glass melt at a temperature of more than 1200 degrees Celsius.

29. (new) The method according to Claim 28 comprising producing a melt of glass according to step (a) from at least one member of the group comprising: borosilicate glass, neutral glass, and aluminosilicate glass.

30. (new) The method according to claim 29 wherein said glass object is hot formed from a melt of glass having the following material composition, which materials are in ranges in weight percent on an oxide basis: silicon dioxide (SiO_2) from 40% to 75%; alumina (Al_2O_3) from 10% to 27%; boric oxide (B_2O_3) from 0% to 15%; magnesium oxide (MgO) from 0% to 10%; calcium oxide (CaO) from 0% to 12%; strontium oxide (SrO) from 0% to 12%; barium oxide

(BaO) from 0% to 30%; zinc oxide (ZnO) from 0% to 10%; zirconium oxide (ZrO_2) from 0% to 5%; lithia (lithium oxide (Li_2O) + sodium oxide (Na_2O) + potassium oxide (K_2O)) from 0% to 7%; titania (titanium dioxide - TiO_2) from 0% to 5.5%; phosphorous oxide (P_2O_5) from 0% to 9.0%; and optional fining agents and coloring components in conventional quantities.

31. (new) The method according to Claim 29 wherein said glass object is hot formed from a glass melt having the following material composition, which materials are in ranges in weight percent on an oxide basis: silicon dioxide (SiO_2) from 60% to 80%; alumina (Al_2O_3) from 2% to 10%; boric oxide (B_2O_3) from 5% to 20%; magnesium oxide (MgO) from 0% to 8%; calcium oxide (CaO) from 0% to 12%; strontium oxide (SrO) from 0% to 8%; barium oxide (BaO) from 0% to 12%; zinc oxide (ZnO) from 0% to 10%; zirconium oxide (ZrO_2) from 0% to 5%; lithia (lithium oxide (Li_2O) + sodium oxide (Na_2O) + potassium oxide (K_2O)) from 2% to 12%; and optional fining agents and coloring components in conventional quantities.

32. (new) The method according to Claim 23 wherein hot forming according to step (b) comprises drawing said glass body from said melt of glass.

33. (new) The method according to Claim 32 wherein glass is drawn in tubular form from said melt of glass.

34. (new) The method according to Claim 33 which comprises: exposing, during drawing of glass in tubular form, the inner surface of glass in tubular form to said stream of gas.

35. (new) The method according to Claim 23 wherein glass is drawn in flat form from said melt of glass.

36. (new) The method according to Claim 23 comprising at least one of:

maintaining said melt of molten glass at a viscosity with a value selected in the range of from 10^4 dPas (10,000 decipascals) to 10^5 dPas (100,000 decipascals); and

said glass body is hot formed from a melt maintained at a temperature of more than 1000 degrees Celsius, in particular from a hot glass melt at a temperature of more than 1200 degrees Celsius.

37. (new) The method according to Claim 36 comprising producing a melt of glass according to step (a) from at least one member of the group comprising: borosilicate glass, neutral glass, and aluminosilicate glass.

38. (new) The method according to claim 37 wherein said glass

object is hot formed from a melt of glass having the following material composition, which materials are in ranges in weight percent on an oxide basis: silicon dioxide (SiO_2) from 40% to 75%; alumina (Al_2O_3) from 10% to 27%; boric oxide (B_2O_3) from 0% to 15%; magnesium oxide (MgO) from 0% to 10%; calcium oxide (CaO) from 0% to 12%; strontium oxide (SrO) from 0% to 12%; barium oxide (BaO) from 0% to 30%; zinc oxide (ZnO) from 0% to 10%; zirconium oxide (ZrO_2) from 0% to 5%; lithia (lithium oxide (Li_2O) + sodium oxide (Na_2O) + potassium oxide (K_2O)) from 0% to 7%; titania (titanium dioxide - TiO_2) from 0% to 5.5%; phosphorous oxide (P_2O_5) from 0% to 9.0%; and optional fining agents and coloring components in conventional quantities.

39. (new) The method according to Claim 37 wherein said glass object is hot formed from a glass melt having the following material composition, which materials are in ranges in weight percent on an oxide basis: silicon dioxide (SiO_2) from 60% to 80%; alumina (Al_2O_3) from 2% to 10%; boric oxide (B_2O_3) from 5% to 20%; magnesium oxide (MgO) from 0% to 8%; calcium oxide (CaO) from 0% to 12%; strontium oxide (SrO) from 0% to 8%; barium oxide (BaO) from 0% to 12%; zinc oxide (ZnO) from 0% to 10%; zirconium oxide (ZrO_2) from

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0% to 5%; lithia (lithium oxide (Li_2O) + sodium oxide (Na_2O) + potassium oxide (K_2O)) from 2% to 12%; and optional fining agents and coloring components in conventional quantities.